What is claimed is:

1. A pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, wherein the transmissivity of an inner container of the pyrolytic boron nitride double container with respect to light having a wave number of 2600 cm^{-1} to 6500 cm^{-1} is 90 % or less of that of an outer container.

2. The pyrolytic boron nitride double container according to Claim 1, wherein the surface roughness of the outer surface of the inner container is roughened so that the transmissivity of the inner container is 90 % or less of that of the outer container.

3. The pyrolytic boron nitride double container according to Claim 1, wherein an element except nitrogen and boron is doped into the inner container to form a doped layer, while at least one of the thickness, area, and doping density of the doped layer is adjusted, so that the transmissivity of the inner container is 90 % or less of that of the outer container.

4. The pyrolytic boron nitride double container according to Claim 2, wherein an element except nitrogen and boron is doped into the inner container to form a doped layer, while at least one of the thickness, area, and

doping density of the doped layer is adjusted, so that the transmissivity of the inner container is 90 % or less of that of the outer container.

5. The pyrolytic boron nitride double container according to Claim 3, wherein the doped layer is formed such that the layer is exposed on neither inner surface nor outer surface of the inner container.

6. The pyrolytic boron nitride double container according to Claim 4, wherein the doped layer is formed such that the layer is exposed on neither inner surface nor outer surface of the inner container.

7. The pyrolytic boron nitride double container according to Claim 3, wherein pyrolytic boron nitride is doped with one or more elements selected from Si, C, and Al.

8. The pyrolytic boron nitride double container according to Claim 4, wherein pyrolytic boron nitride is doped with one or more elements selected from Si, C, and Al.

9. The pyrolytic boron nitride double container according to Claim 5, wherein pyrolytic boron nitride is doped with one or more elements selected from Si, C, and Al.

10. The pyrolytic boron nitride double container

according to Claim 6, wherein pyrolytic boron nitride is doped with one or more elements selected from Si, C, and Al.

11. The pyrolytic boron nitride double container according to Claim 1, wherein the thickness of the inner container is increased so that the transmissivity of the inner container is 90 % or less of that of the outer container.

12. The pyrolytic boron nitride double container according to Claim 2, wherein the thickness of the inner container is increased so that the transmissivity of the inner container is 90 % or less of that of the outer container.

13. The pyrolytic boron nitride double container according to Claim 1, wherein the transmissivity of the inner container has a profile such that the transmissivity changes in the height direction of the inner container.

14. The pyrolytic boron nitride double container according to Claim 2, wherein the transmissivity of the inner container has a profile such that the transmissivity changes in the height direction of the inner container.

15. The pyrolytic boron nitride double container according to Claim 13, wherein the transmissivity of the

inner container decreases at the opening portion of the inner container.

16. The pyrolytic boron nitride double container according to Claim 14, wherein the transmissivity of the inner container decreases at the opening portion of the inner container.

17. The pyrolytic boron nitride double container according to Claim 13, wherein the transmissivity of the inner container increases at the opening portion of the inner container.

18. The pyrolytic boron nitride double container according to Claim 14, wherein the transmissivity of the inner container increases at the opening portion of the inner container.

19. The pyrolytic boron nitride double container according to Claim 1, wherein there is a gap between the inner container and the outer container.

20. The pyrolytic boron nitride double container according to Claim 2, wherein there is a gap between the inner container and the outer container.

21. The pyrolytic boron nitride double container

according to Claim 19, wherein the gap between the inner container and the outer container is 0.2 to 30 mm.

22. The pyrolytic boron nitride double container according to Claim 20, wherein the gap between the inner container and the outer container is 0.2 to 30 mm.

23. A method of manufacturing a pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, wherein an inner container and an outer container of the pyrolytic boron nitride double container are formed by a CVD reaction, the outer surface of the formed inner container is roughened to thereby adjust the amount of light scattered at the outer surface, such that the transmissivity of the inner container with respect to light having a wave number of 2600 cm^{-1} to 6500 cm^{-1} is set to 90 % or less of that of the outer container.

24. A method of manufacturing a pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, in which pyrolytic boron nitride is deposited on a graphite mandrel by a CVD reaction in order to form the double container, and the double container is then separated from the mandrel, wherein a dopant gas is introduced during the CVD reaction of the inner container in order to form a doped layer in

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the pyrolytic boron nitride container, and at least one of the thickness, area and the doping density of the doped layer is adjusted so as to set the transmissivity of the inner container with respect to light having a wave number of 2600 cm^{-1} to 6500 cm^{-1} to 90 % or less of that of the outer container.

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